

FFFFFFFFFFF	111	111	AAAAAAA
FFFFFFFFFFF	111	111	AAAAAAA
FFFFFFFFFFF	111	111	AAAAAAA
FFF	111111	111111	AAA
FFF	111111	111111	AAA
FFF	111111	111111	AAA
FFF	111	111	AAA
FFF	111	111	AAA
FFF	111	111	AAA
FFF	111	111	AAA
FFFFFFFFFFF	111	111	AAA
FFFFFFFFFFF	111	111	AAA
FFFFFFFFFFF	111	111	AAA
FFF	111	111	AAAAAAA
FFF	111	111	AAAAAAA
FFF	111	111	AAAAAAA
FFF	111	111	AAA
FFF	111	111	AAA
FFF	11111111	11111111	AAA
FFF	11111111	11111111	AAA
FFF	11111111	11111111	AAA

NN	NN	XX	XX	TTTTTTTTTT	HH	HH	DDDDDDDD	RRRRRRRR	
NN	NN	XX	XX	TTTTTTTTTT	HH	HH	DDDDDDDD	RRRRRRRR	
NN	NN	XX	XX	TT	HH	HH	DD	RR	RR
NN	NN	XX	XX	TT	HH	HH	DD	RR	RR
NNNN	NN	XX	XX	TT	HH	HH	DD	RR	RR
NNNN	NN	XX	XX	TT	HH	HH	DD	RR	RR
NN	NN	NN	XX	TT	HHHHHHHHHH	DD	DD	RRRRRRRR	
NN	NN	NN	XX	TT	HHHHHHHHHH	DD	DD	RRRRRRRR	
NN	NNNN	XX	XX	TT	HH	HH	DD	RR	RR
NN	NNNN	XX	XX	TT	HH	HH	DD	RR	RR
NN	NN	XX	XX	TT	HH	HH	DD	RR	RR
NN	NN	XX	XX	TT	HH	HH	DD	RR	RR
NN	NN	XX	XX	TT	HH	HH	DDDDDDDD	RR	RR
NN	NN	XX	XX	TT	HH	HH	DDDDDDDD	RR	RR

```
1 0001 0 MODULE NXTHDR (
2 0002 0
3 0003 0 LANGUAGE (BLISS32),
4 0004 0 IDENT = 'V04-000'
5 0005 1 ) =
6 0006 1 BEGIN
7 0007 1
8 0008 1 ****
9 0009 1 *
10 0010 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
11 0011 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
12 0012 1 * ALL RIGHTS RESERVED.
13 0013 1 *
14 0014 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
15 0015 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
16 0016 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
17 0017 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
18 0018 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
19 0019 1 * TRANSFERRED.
20 0020 1 *
21 0021 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
22 0022 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
23 0023 1 * CORPORATION.
24 0024 1 *
25 0025 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
26 0026 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
27 0027 1 *
28 0028 1 *
29 0029 1 ****
30 0030 1
31 0031 1 ++
32 0032 1
33 0033 1 FACILITY: F11ACP Structure Level 1
34 0034 1
35 0035 1 ABSTRACT:
36 0036 1
37 0037 1 This routine reads the next extension header, if any, of the
38 0038 1 given file.
39 0039 1
40 0040 1 ENVIRONMENT:
41 0041 1
42 0042 1 STARLET operating system, including privileged system services
43 0043 1 and internal exec routines.
44 0044 1
45 0045 1 --
46 0046 1
47 0047 1
48 0048 1 AUTHOR: Andrew C. Goldstein, CREATION DATE: 22-Jul-1977 17:40
49 0049 1
50 0050 1 MODIFIED BY:
51 0051 1
52 0052 1 A0100 ACG0001 Andrew C. Goldstein, 10-Oct-1978 20:01
53 0053 1 Previous revision history moved to F11A.REV
54 0054 1
55 0055 1 !**
56 0056 1
57 0057 1
```

NXTHDR
V04-000

C 6
16-Sep-1984 01:12:24 14-Sep-1984 12:29:47 VAX-11 Bliss-32 V4.0-742 Page 2
DISK\$VMSMASTER:[F11A.SRC]NXTHDR.B32;1 (1)

: 58 0058 1 LIBRARY 'SYSSLIBRARY:LIB:L32';
: 59 0059 1 REQUIRE 'SRC\$:FCPDEF.B32';

PM
VO

```
61 0374 1 GLOBAL ROUTINE NEXT_HEADER (HEADER, FCB, EXT_FID, SEGNUM) =  
62 0375 1  
63 0376 1 !++  
64 0377 1  
65 0378 1 FUNCTIONAL DESCRIPTION:  
66 0379 1  
67 0380 1 This routine reads the next extension header, if any, of the  
68 0381 1 indicated file. Extension data is taken from either the indicated  
69 0382 1 file header or the arguments.  
70 0383 1  
71 0384 1  
72 0385 1 CALLING SEQUENCE:  
73 0386 1 NEXT_HEADER (ARG1, ARG2, ARG3, ARG4)  
74 0387 1  
75 0388 1 INPUT PARAMETERS:  
76 0389 1 ARG1: address of current file header or 0  
77 0390 1 ARG2: address of corresponding FCB or zero  
78 0391 1 ARG3: extension file ID, if present  
79 0392 1 ARG4: extension segment number, if present  
80 0393 1  
81 0394 1 IMPLICIT INPUTS:  
82 0395 1 NONE  
83 0396 1  
84 0397 1 OUTPUT PARAMETERS:  
85 0398 1 NONE  
86 0399 1  
87 0400 1 IMPLICIT OUTPUTS:  
88 0401 1 NONE  
89 0402 1  
90 0403 1 ROUTINE VALUE:  
91 0404 1 Address of header read or 0 if none  
92 0405 1  
93 0406 1 SIDE EFFECTS:  
94 0407 1 File header may be read  
95 0408 1  
96 0409 1 !--  
97 0410 1  
98 0411 2 BEGIN  
99 0412 2  
100 0413 2 MAP  
101 0414 2 HEADER : REF BBLOCK, ! file header arg  
102 0415 2 FCB : REF BBLOCK, ! FCB arg  
103 0416 2 EXT_FID : REF BBLOCK: ! extension file ID arg  
104 0417 2  
105 0418 2 LOCAL  
106 0419 2 NEW_HEADER : REF BBLOCK, ! address of extension file header read  
107 0420 2 MAP_AREA : REF BBLOCK, ! address of header map area  
108 0421 2 EXT_FCB : REF BBLOCK, ! address of extension FCB  
109 0422 2 FILE_ID : BBLOCK [FIDSC_LENGTH], ! file ID of extension header  
110 0423 2 SEG_NUMBER : BYTE: ! segment number of file header  
111 0424 2  
112 0425 2 EXTERNAL ROUTINE  
113 0426 2 READ_HEADER; ! read a file header  
114 0427 2  
115 0428 2  
116 0429 2 ! Get the extension file number of the file header. If it is zero, then  
117 0430 2 ! there is no extension header. If it is non-zero, read the header, using
```

```

118      0431 2 ! the extension FCB if one exists.
119      0432 2
120      0433 2
121      0434 2 IF ACTUALCOUNT LSS 4
122      0435 2 THEN
123      0436 3 BEGIN
124      0437 3 MAP_AREA = .HEADER + .HEADER[FH1$B_MPOFFSET]*2;
125      0438 3 FILE_ID[FID$W_NUM] = .MAP_AREA[FM1$W_EX_FILNUM];
126      0439 3 FILE_ID[FID$W_SEQ] = .MAP_AREA[FM1$W_EX_FILSEQ];
127      0440 3 FILE_ID[FID$W_RVN] = 0;
128      0441 3 SEG_NUMBER = .MAP_AREA[FM1$B_EX_SEGNUM] + 1;
129      0442 2 END
130      0443 2 ELSE
131      0444 3 BEGIN
132      0445 3 CHSMOVE (FID$C_LENGTH, .EXT_FID, FILE_ID);
133      0446 3 SEG_NUMBER = .SEGNUM;
134      0447 2 END;
135      0448 2
136      0449 2 IF .FILE_ID[FID$W_NUM] EQL 0 THEN RETURN 0;
137      0450 2 EXT_FCB =
138      0451 3 (IF .FCB NEQ 0
139      0452 3 THEN .FCB[FCBSL_EXFCB]
140      0453 3 ELSE 0
141      0454 2 );
142      0455 2 NEW_HEADER = READ_HEADER (FILE_ID, .EXT_FCB);
143      0456 2
144      0457 2 ! Check the segment number of the header read for consistency.
145      0458 2
146      0459 2
147      0460 2 MAP_AREA = .NEW_HEADER + .NEW_HEADER[FH1$B_MPOFFSET]*2;
148      0461 2 IF .SEG_NUMBER NEQ .MAP_AREA[FM1$B_EX_SEGNUM]
149      0462 2 THEN ERR_EXIT (SS$_BADFILEHDR);
150      0463 2
151      0464 2 RETURN .NEW_HEADER;
152      0465 2
153      0466 1 END;                                ! end of routine NEXT_HEADER

```

.TITLE NXTHDR
.IDENT \V04-000\

.EXTRN READ_HEADER

.PSECT \$CODE\$,NOWRT,2

5E	04	003C 00000	ENTRY	NEXT_HEADER, Save R2,R3,R4,R5	0374
04		08 C2 00002	SUBL2	#8, SP	0434
		6C 91 00005	CMPB	(AP), #4	
		19 1E 00008	BGEQU	1\$	
51	04	AC D0 0000A	MOVL	HEADER, R1	0437
50	01	A1 9A 0000E	MOVZBL	1(R1), R0	
52		6140 3E 00012	MOVAW	(R1)[R0], MAP_AREA	
6E	02	A2 D0 00016	MOVL	2(MAP AREA), FILE_ID	0438
	04	AE B4 0001A	CLRW	FILE_ID+4	0440
53	62	01 81 0001D	ADD\$3	#1, TMAP_AREA), SEG_NUMBER	0441
		09 11 00021	BRB	2\$	0434
6E	0C BC	06 28 00023 1\$:	MOVC3	#6, @EXT_FID, FILE_ID	0445

53	10	AC	90	00028		MOVB	SENUM, SEG_NUMBER	0446	
		6E	B5	0002C	28:	TSTW	FILE_ID	0449	
		31	13	0002E		BEQL	6\$		
50	08	AC	D0	00030		MOVL	FCB, R0	0451	
		06	13	00034		BEQL	3\$		
50	0C	AO	D0	00036		MOVL	12(R0), EXT_FCB	0452	
		02	11	0003A		BRB	4\$		
		50	D4	0003C	38:	CLRL	EXT_FCB	0451	
		50	DD	0003E	48:	PUSHL	EXT_FCB	0455	
0000G	04	AE	9F	00040		PUSHAB	FILE_ID		
		02	FB	00043		CALLS	#2, READ HEADER		
		51	50	00048		MOVL	R0, NEW HEADER		
		50	01	A1	9A 0004B	MOVZBL	1(NEW HEADER), R0	0460	
		52	6140	3E	0004F	MOVAW	(NEW HEADER)[R0], MAP_AREA		
		62		53	91 00053	CMPB	SEG_NUMBER, (MAP_AREA)	0461	
				05	13 00056	BEQL	5\$		
	0810		8F	BF	00058	CHMU	#2064	0462	
				04	0005C	RET			
		50	51	D0	0005D	58:	MOVL	NEW_HEADER, R0	0464
				04	00060		RET		
			50	D4	00061	68:	CLRL	R0	0466
				04	00063		RET		

: Routine Size: 100 bytes. Routine Base: \$CODE\$ + 0000

```
: 154      0467 1
: 155      0468 1 END
: 156      0469 0 ELUDOM
```

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	100	NOVEC,NOWRT, RD, EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	----- Symbols -----			Pages Mapped	Processing Time
	Total	Loaded	Percent		
\$_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	11	0	1000	00:01.9

NXTHDR
V04-000

G 6
16-Sep-1984 01:12:24
14-Sep-1984 12:29:47

VAX-11 Bliss-32 V4.0-742

DISK\$VMSMASTER:[F11A.SRC]NXTHDR.B32;1

Page 6
(2)

COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:NXTHDR/OBJ=OBJ\$:NXTHDR MSRC\$:NXTHDR/UPDATE=(ENH\$:NXTHDR)

: Size: 100 code + 0 data bytes
: Run Time: 00:06.5
: Elapsed Time: 00:17.9
: Lines/CPU Min: 4315
: Lexemes/CPU-Min: 13628
: Memory Used: 88 pages
: Compilation Complete

0166 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY

REQUE
LIS

RWATTR
LIS

MODIFY
LIS

SCHFCB
LIS

MAKREC
LIS

MPWIND
LIS

MAPUBN
LIS

PMS
LIS

ROHEOR
LIS

RWUB
LIS

SMALOC
LIS

ROBLOK
LIS

RETDIR
LIS

MOUNT
LIS

NXTHOR
LIS

MAKNMB
LIS

MAKSTR
LIS